

Howard Wei

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EDUCATION

San Jose State University

San Jose, CA

B.S. in Computer Science, Minor in Business

Expected Graduation: May 2027

Relevant Coursework: Software Engineering, Artificial Intelligence, Machine Learning, Data Visualization, Big Data

EXPERIENCE

Cytokinetics

South San Francisco, CA

Software Engineer

Sept 2025 – Present

- Engineering a **HIPAA-compliant** multi-agent architecture via **LangChain** and **AWS** for audit trail analysis.
- Streamlined clinical data review using **Python** and **Pandas**, cutting outstanding review time by **10 days**.

Cytokinetics

South San Francisco, CA

Software Engineer Intern

May 2025 – Aug 2025

- Built an end-to-end agentic AI data dashboard application with **AWS** (Bedrock, Lambda, S3) and **Python**, reducing biological data analysis latency by **80%+**.
- Created an IronPython-JavaScript API system to generate advanced scientific visualizations with **Spotfire** for complex chemical structures.
- Integrated a **PostgreSQL**-backed memory layer to preserve user-agent context across concurrent sessions.

Google Developer Group

Merced, CA

Machine Learning Lead

Sept 2024 – Dec 2024

- Deployed a paper trading platform to analyze trading habits and provide retail investors with insights using **AWS** (EC2, RDS, Lambda).
- Directed a **25-member ML team** using **Agile** methodologies (Kanban) and **Jira**, owning **CI/CD** pipelines that automated model testing and deployment.
- Organized a data **ETL** pipeline to Llama API through **Django REST** and **MySQL** market data sources, improving financial advice accuracy by **35%** across 7 different metrics.

AI & ML SJSU

San Jose, CA

Software Engineer

Sept 2024 – May 2025

- Developed API endpoints with **TypeScript** for **PostgreSQL** user data storage and retrieval.
- Implemented frontend with **React** and **Tailwind CSS**, allowing member content sharing and event publishing.

PROJECTS

Telemetry Driving Style Regression – Python, GCP, PyTorch, XGBoost, Pandas, NumPy, Matplotlib

- Trained and analyzed **4 ML models** (Ridge, Random Forest, Multi-Layered Perceptron, Long Short-Term Memory) on **146,000+** instances of raw corner telemetry data from Formula 1.
- Predicted **3-axis driver-style metrics** across in-distribution and unseen track conditions, achieving a top test **Mean Absolute Error** of **0.0259** with an LSTM architecture.

SpotlightAI – Python, GCP, ChromaDB, FastAPI, Postman, GeoPy, PostgreSQL, Streamlit

- Organized development of an **end-to-end system architecture** of a review-based restaurant recommendation RAG model with additional location-based capabilities.
- Enabled **ChromaDB**-powered **retrieval-augmented generation** for Gemini, reducing inconsistencies by **99%**.

EmotionAI – Python, TensorFlow, PyTorch, OpenCV, Pandas, Matplotlib, Streamlit

- Led 5 student engineers across 4 universities in developing a Python-OpenCV human emotion detection model.
- Deployed on **Streamlit** with user-AI interactions through webcam, achieving **60%+** accuracy in live testing.

TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, Java, C, C++, MATLAB, R, SQL, Bash

Frameworks: LangChain, CrewAI, TensorFlow, PyTorch, Streamlit, Django, React, Vue, Tailwind CSS

Developer Tools: AWS, GCP, Azure, Git, Claude Code, Codex, Jira, Docker, Kubernetes, Firebase, Postman

Libraries: ChromaDB, OpenCV, Keras, Matplotlib, Seaborn, NumPy, Pandas, Scikit, Pydide, SWR, XGBoost

Interests: Bioinformatics, Data Analytics, Formula 1, LLM Inference, Rock Climbing, Systems Architecture